

## AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A catalyst composition for polymerization of a conjugated diene, comprising:
  - (A) a metallocene-type complex of a rare earth metal compound;
  - (B) aluminoxane; and
  - (C) a combination of two or more organometallic compounds of group I to group III elements in a periodic table, wherein said combination is a combination of triisobutylaluminum and diisobutylaluminum hydride.
2. **(Original)** The catalyst composition according to claim 1, wherein the metallocene-type complex is a samarium complex.
3. **Canceled.**
4. **Canceled.**
5. **Canceled.**
6. **(Previously Presented)** The catalyst composition according to claim 1, further comprising an ionic compound composed of a non-coordinating anion and a cation.

7. **(Withdrawn)** A co-catalyst used along with a polymerization catalyst for a conjugated diene containing a metallocene-type complex of a rare earth metal compound, comprising: aluminoxane; and a combination of two or more organometallic compounds of group I to group III elements in a periodic table.
8. **(Previously Presented)** A production method for a conjugated diene, comprising polymerizing a conjugated diene in the presence of the catalyst composition according to claim 1.
9. **(Withdrawn)** A polymer which can be obtained by polymerization of a conjugated diene through the method according to claim 8.
10. **(Withdrawn)** The polymer according to claim 9, wherein: a cis-1,4-configuration content in microstructure of the polymer is 98.5 mol% or more; a number average molecular weight is 250,000 to 350,000; and a molecular weight distribution  $M_w/M_n$  is 2.00 or less.
11. **(Withdrawn)** A polymer of a conjugated diene, wherein: a cis-1,4-configuration content in microstructure of the polymer is 98.5 mol% or more; a number average

molecular weight is 250,000 to 350,000; and a molecular weight distribution Mw/Mn is 2.00 or less.

12. (New) The catalyst composition of claim 1 further comprising an additional metal alkyl compound or metal alkyl hydride.

#### REMARKS

Claims 3-5 have been canceled. Claims 7 and 9-11 are withdrawn. Claims 1, 2, 6 and 8 are pending. New claim 12 has been added.

Claim 1 has been amended by further limiting the combination to a combination of triisobutylaluminum and diisobutylaluminum hydride. Support for the amendment can be found in now canceled claim 5.

Support for new claim 12 can be found in original claim 4 and in the Specification on page 6, lines 4-8.

No new matter has been added.

#### Rejections Under 35 USC § 102

The Examiner has rejected claims 1-4, 6 and 8 as anticipated by Kaita et al. The Examiner contends that Kaita et al. teach a catalyst composition comprising a metallocene-type complex of a rare earth metal such as samarium, an ionic compound composed of a non-coordinating anion and a cation and aluminoxane for producing high cis-1,4-polybutadiene as well as other embodiments of the invention.

The Examiner states that claim 5 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.